KAWAI

PXG30

Owner's Manual

Thank you for choosing this Kawai PXG30 Digital Piano.

Your new Kawai PXG30 Digital Piano is a high-quality instrument offering the very latest in leading-edge music technology.

This manual contains valuable information that will help you make full use of your PXG30's many capabilities. Please read it carefully and keep it handy for further reference.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a different electrical circuit from the receiver.
— Consult the dealer or an experienced radio/TV technician for help.

■ This instrument complies with the limits for a class B digital apparatus, pursuant to the Radio Interference Regulations, C.R.C., c. 1374.

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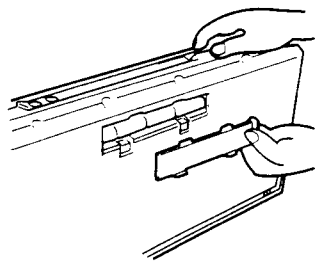
1. Trouble-Shooting On Your PXG30

Symptom:	Check the following:
The keyboard makes no sound.	1) Check your power adaptor. We recommend that you use a KAWAI 12-volt adaptor. 2) If using a universal adaptor from another manufacturer: – Is the voltage set at 12-volts? – Is it set to negative (−) polarity? – Is it rated above 0.5 Amp (or 500 mA)? 3) Have you tried six fresh batteries? 4) Are all the batteries aligned in the proper direction?
The front panel has a "cloudy" finish or has begun to "bubble" or "peel". This is not a defect.	There is a thin plastic film applied to the glossy panel (where the buttons are located) for protection during shipping. You can remove this film at any time. Use a fingernail to carefully lift up one of the edges, then peel off the protective film.
You are using the SELECTOR buttons to select a specific two-digit or three-digit number, but a lower number appears in the display.	You may be taking too long to enter the second or third digits. Once you enter the first digit, the keyboard waits for about one second to see if a second or third digit will follow. If the second or third digit is not entered within that one-second "waiting period", the keyboard assumes that you meant to enter a single-digit number only. Be sure to enter all two-digit and three-digit numbers in rapid succession.
The RECORDER suddenly stops.	This usually happens when you have exceeded the RECORDER's memory capacity.
The keyboard only plays drum sounds.	The DRUM SET sound (=129) has probably been selected. Use the SOUND and SELECTOR buttons to select a different sound (refer to the "Getting Started" section of the manual).
The Sustain function will not work even if you use an optional footswitch (model F-1).	Sustain will not work with certain percussive sounds.

■ Before Using Your PXG30

1) Cautions

- Do not subject the keyboard to severe shocks.
- Do not expose the keyboard to direct sunlight, or high temperatures (such as inside your car on a warm day).
- Do not use the keyboard where there is excessive moisture or dust.
- Do not disassemble or attempt to modify the keyboard.
- Should the keyboard become soiled, clean it using a soft, dry cloth. If this does not remove the stain, wet the cloth slightly before wiping. Never use alcohol or thinner to clean your keyboard.
- Do not allow foreign matter to enter the gaps between the keys or around the buttons.



2) Connecting the Power Supply

Your keyboard can use either your home AC power outlet or dry cell batteries as a power source.

■ **To insert batteries:**

1. Turn the unit over and remove the battery cover.
2. Insert six Size C (R14P) dry cell batteries. Be sure they are aligned in the proper direction.
3. Replace the battery cover.

⚠ *As the batteries begin to run down, the volume of the keyboard will decrease and the sound quality will begin to change or deteriorate. The unit may begin to malfunction. At that time, you should replace all six of the batteries.*
Do not mix battery types (or new batteries with old ones), as this may cause problems such as battery fluid leakage.
Remove the batteries when not using the keyboard for long periods of time.

■ To Use An AC Power Outlet:

Connect a PS-123 adaptor to the adaptor terminal on the rear panel of the keyboard. Then, connect the adaptor to a wall socket.

⚠ *We recommend that you use a KAWAI AC adaptor (12-volt/500 mA) with the PXG30. If you decide to use a universal adaptor from another manufacturer, please be sure of the following:*

(1) The voltage selector should be set at 12-volts.

(2) The polarity selector must be set to "negative" (—) polarity, otherwise the keyboard will not operate (or will run on batteries until the batteries are drained).

(3) The adaptor must have at least 0.5 Amp (A).

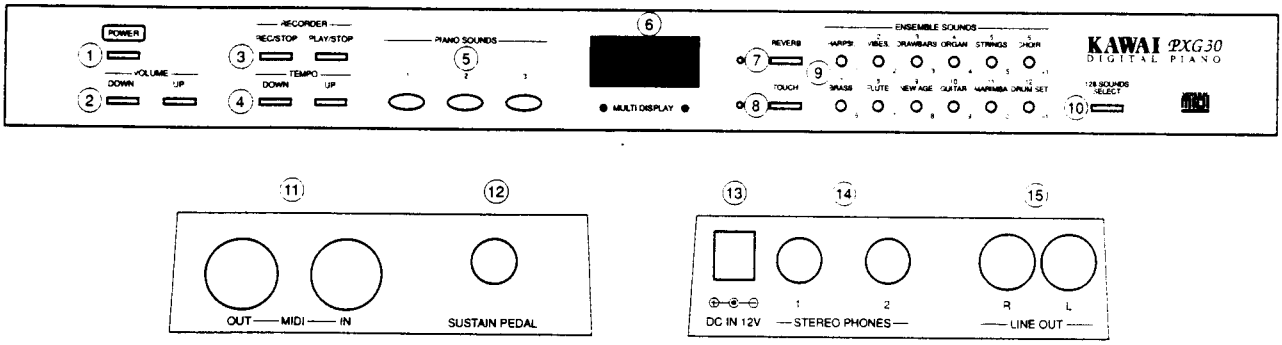
■ Connecting the Keyboard to an Audio Device

To enjoy listening to the sound of your PXG30 through your amplified home stereo system or other external amplifier, purchase an adaptor plug or cord (with a stereo phones plug on one end and connectors appropriate for your audio device on the other end) at an electrical goods store or audio specialty shop. Use the cord or adaptor plug to connect the keyboard's STEREO PHONES jack to the LINE IN or AUX IN jacks on your stereo amplifier or powered receiver. Be sure you set your PXG30 at a moderate volume level. High volume output can damage your external amplifier or speakers.

■ Protective Plastic Covering On Front Panel

Your keyboard comes equipped with a thin plastic covering over the front panel designed to protect the panel from dust and scratches. If you want to remove this covering, carefully use a fingernail to lift up one of the corners. Then, slowly peel off the covering and discard it.

2. KEYBOARD OVERVIEW

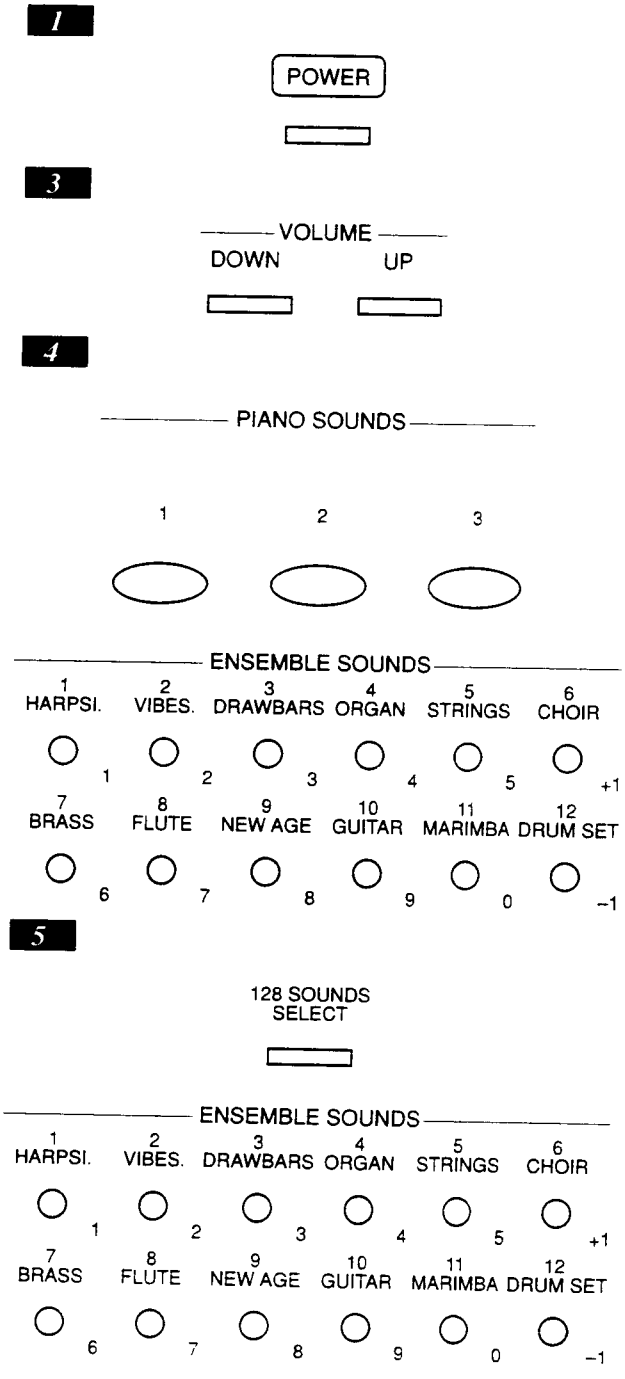


① POWER button (Refer to P.3)
② VOLUME control buttons (Refer to P.4)
③ RECORDER Section (Refer to P.5)
④ TEMPO Control buttons (Refer to P.5)
⑤ PIANO Sound buttons (Refer to P.4,5)
⑥ MULTI DISPLAY
⑦ REVERB button (Refer to P.4)
⑧ TOUCH (Touch Response) button (Refer to P.4)
⑨ ENSEMBLE SOUNDS buttons (Refer to P.3) (Numeric Entry Buttons)
⑩ 128 SOUNDS SELECT button (Refer to P.3)
⑪ MIDI Jacks (Refer to P.13)
*⑫ Sustain Pedal Jack
⑬ AC Adaptor Jack (Refer to P.2)
⑭ Headphone Jacks (Refer to P.2)
⑮ LINE OUT Jacks

*⑫ Sustain Pedal Jack : A sustain pedal (Kawai F-1) can be connected to this jack. When you press the pedal while playing, the sound from the keyboard will be sustained even after you remove your hands from the keys.

3. GETTING STARTED

◆ BASIC OPERATION



STEP 1
Press the **POWER** switch to turn the unit ON.

STEP 2
Press one of the keys on the keyboard. You should hear the sound which is numbered P-1.
Your PXG30 features Touch Response capability which allows you to control the volume of each note by playing with hard or soft force, like an acoustic piano. Try playing a few notes with varying force.

STEP 3
Adjust the volume of the entire keyboard with the VOLUME buttons. The current volume level will appear briefly in the display each time a VOLUME button is pressed. The volume setting can range from 0 to 15.

STEP 4
The PXG30 offers three exceptional PIANO sounds (P-1, P-2 and P-3) which are selected with the oval-shaped SOUND SELECT buttons, and twelve Ensemble Instrument sounds (E-1 through E-12) which can be selected using the round SOUND SELECT buttons located just to the right of the display.
Take a few moments to select and hear each of these sounds.

STEP 5
The PXG30 also features 128 General MIDI Tone Colors. (See page 13 for list). These tones can be selected by using the round SOUND SELECT buttons as "numeric entry buttons".
The numeric values are printed in RED at the bottom right of each SOUND SELECT button.

To select sound number 047 (HARP), press the **128 SOUNDS SELECT** button. Then quickly press "**0**", "**4**" and "7" using the red numeric values as your guide. The display will change to read "047" and the HARP sound will be heard when you press the keys.
You can also choose to enter just "4" and "7" for sound "047". The PXG30 will pause for about one second before the display changes to indicate your selection. Entering all three digits will avoid this one-second pause.

NOTE: Be sure to enter all numeric values in rapid order. If you wait too long to enter a second or third digit, the PXG30 will accept your partial entry as your selection. As an example, let's assume that you wanted to select sound "047". If you enter "4" and wait for more than one second before entering "7", the PXG30 will select sound "004" and then select sound "007". Entering the digits quickly will avoid this occurrence.

6

128 SOUNDS SELECT

The "+1" and "−1" buttons (these symbols also appear in red) can be used to change the number in the display up or down by a value of one. Press the "+1" button. The display will change to read 048 and the TIMPANI sound will be heard when you play the keys. Pressing the "−1" will allow you to return to the HARP sound.

STEP 6
Press the **128 SOUNDS SELECT** button again to return to the normal mode. Once in normal mode, the PXG30 returns to the sound which was in use before you left the normal mode. If you return to the 128 SOUNDS mode, the sound that you last selected in that mode will appear.

NOTE:
(1) Refer to the list on page 13 for selecting tones from the 128 GENERAL MIDI TONES LIBRARY.
(2) When you enter the number 129 (or higher) while in the 128 SOUNDS mode, the PXG30 will assign drum and percussion sounds to the keys. These DRUM SET key assignments conform to the General MIDI standard.

◆ REVERB AND TOUCH RESPONSE

REVERB

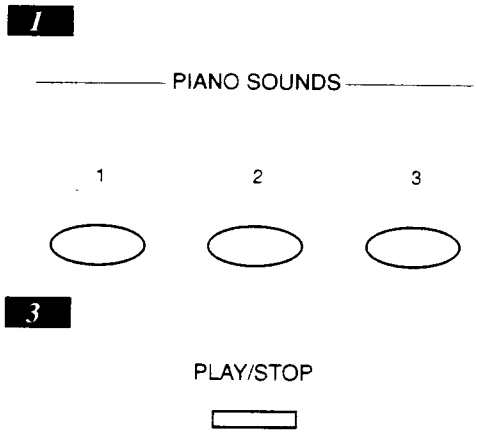
TOUCH

The PXG30 lets you add reverberation to any sound to simulate the natural resonance of a concert hall. This feature is ON whenever the REVERB light is lit. Just press the **REVERB** button to activate it.

The PXG30 also features Touch Response capability, which allows you to control the volume of each note by playing with hard or soft force on the keys. If you did not try this earlier in the Basic Operation section, play a few notes now with varying force. You will hear that soft force produces a quiet volume and hard force produces loud volume.

Touch Response is ON whenever the TOUCH button light is lit.
If Touch Response is not already on, press the TOUCH button to activate it. You can also adjust the level of "touch sensitivity" by changing the Touch Type setting in the Programming Mode (see page 8).

◆ DEMONSTRATION SONG



The PXG30 offers you three different demonstration songs. To access them, follow the steps below:

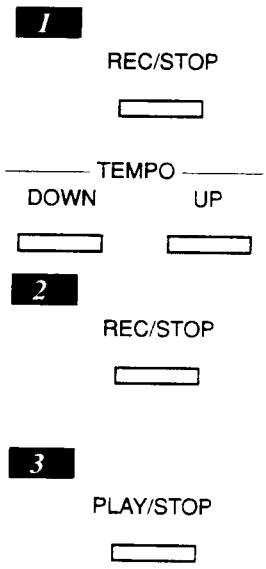
STEP 1
Press the three oval-shaped PIANO buttons simultaneously. The PXG30 will begin to play the three demonstration songs in the following order:
1. Romantic Piano Music: Fantaisie-Impromptu (by F. Chopin)
2. Authentic Orchestral Work: Carmen Prelude (by G. Bizet)
3. Pop Style: Original Contemporary Song (Kawai)

While listening to these demonstration songs, you will not be able to play sounds on the keyboard.

STEP 2
You can select a particular demonstration song (from the 3 shown above) by pressing the appropriate PIANO button while the PXG30 is currently playing a demonstration song. For example, to select the Carmen Prelude, press the second PIANO button while the demonstration song is playing.

STEP 3
To stop the demonstration songs, press PLAY/STOP button in the RECORDER section.

4. DIGITAL RECORDER AND METRONOME



The PXG30's built-in DIGITAL RECORDER records all the notes you play on the keyboard. To assist in recording, the METRONOME function begins automatically when you start to record. Use the following steps to record a song:

STEP 1
Press the **REC/STOP** button in the RECORDER section. The METRONOME will start. Use the TEMPO buttons to set an appropriate tempo for your song.

STEP 2
Play a song on the keyboard. The PXG30 will automatically start recording the moment you press any key. When you've finished your song, press the **REC/STOP** button again.

Sounds, Reverb On/Off settings, and Touch Response On/Off settings can all be changed during recording. These changes will be heard on playback.

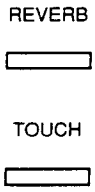
Tempo can be changed during recording, but tempo changes will not appear on playback. Tempo settings can range from 40 to 200 beats per minute.

NOTE:
- When you start recording, the PXG30 will automatically erase any previously recorded song.
- If you change sounds during recording, all sound changes will be heard on playback. For example, if you change from PIANO to BRASS in the fourth measure, the PXG30 will always change to BRASS at that point in the SONG. So, if you selected the STRINGS sound for playback of the song, you would hear STRINGS until the fourth measure when BRASS would appear again.

STEP 3
To replay your song, press the **PLAY/STOP** button. On playback, you can still change sounds, Reverb On/Off settings and tempo. Playback will automatically stop when the song ends. To stop playback before the song is finished, press the **PLAY/STOP** button again.

5. OTHER OPERATIONS

◆ PROGRAMMING MODE



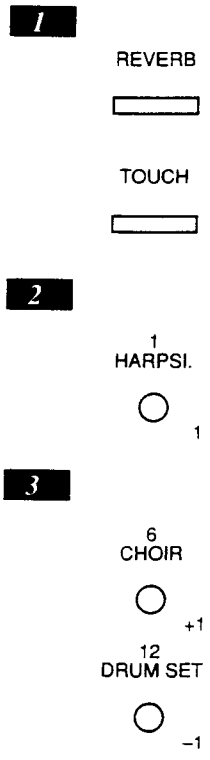
The Programming Mode gives you access to many other useful features on PXG30. To enter Programming Mode, press the **REVERB** button while holding down the **TOUCH** button. The display will begin to flash – allowing you to select a programming function.

To exit the Programming Mode, press any button except the REVERB, TOUCH and SOUND SELECT buttons.

The following are functions that can be selected through Programming Mode:

PROGRAMMING MODE FUNCTIONS
- Local Control On/Off (red numeric value: 1)
- Tuning (red numeric value: 2)
- Transpose (red numeric value: 3)
- Selecting a Touch Type (red numeric value: 4)
- MIDI Transmit Channel Select (red numeric value: 5)
- MIDI Channel Part Mute (red numeric value: 6)

◆ LOCAL CONTROL On/Off (*MIDI FUNCTION, See P.11)



Using Local Control, you can determine whether or not your keyboard produces sound when the keys are played.
Why would you want to turn off the keyboard's sound? When using MIDI, your PXG30 can operate as a "controller" used to control the sound of another MIDI-equipped keyboard. In this situation, you may want to play the keys on your PXG30 but hear only the sound of the other keyboard (sometimes referred to as the "slave" keyboard) that is being controlled through MIDI.

STEP 1
Enter the Programming Mode as described earlier.

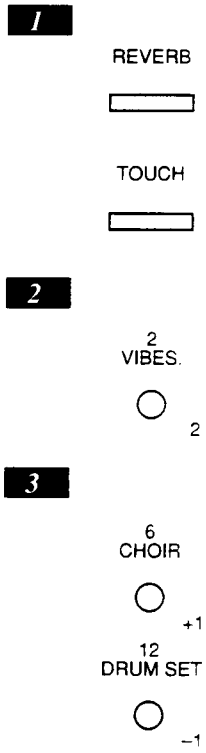
STEP 2
Press the round **SOUND SELECT** button marked with a "1" in red. The display will begin to flash, alternately showing the letters "Loc" (short for Local Control) and "on" (or "off").

STEP 3
Press the "−1" button (the "−1" is shown in red). The flashing display will alternate between the letters "Loc" and "off". This indicates that Local Control is off, so that you will not hear sound when you play the keys.

STEP 4
To turn Local Control back on, press the "+1" button. The display will alternate between "Loc" and "on". This indicates that Local Control is once again on.

STEP 5
At this point, you can select other Programming Mode functions or exit to normal playing mode. To remain in Programming Mode, press one of the SOUND SELECT buttons to select a different programming mode functions (see the list of PROGRAMMING MODE FUNCTIONS on page 6).
To exit Programming Mode, press any button that is not a REVERB, TOUCH or SOUND SELECT button. When the display stops flashing, you will know that you have returned to normal mode.

◆ TUNING (Pitch Adjustment)



The tuning function in Programming Mode lets you tune the PXG30 to accurately match the pitch of other ensemble instruments. Follow these steps to tune your PXG30.

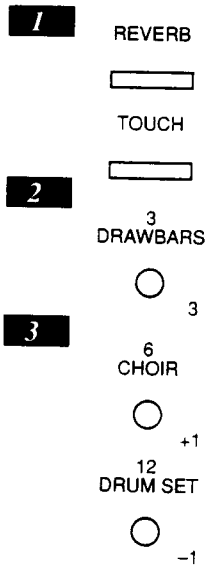
STEP 1
Enter the Programming Mode.

STEP 2
Press the round **SOUND SELECT** button marked "2". The display will begin to flash, alternating between the letters "tun" (short for Tuning) and the number "00" (or a current tuning value).

STEP 3
Press either the "**+1**" or "**−1**" button. (The tune setting can range from −7 to +8.) If you press the "**+1**" button once, the number in the display will change to read "01" and the pitch will raise slightly. If you press the "**−1**" button instead, the number in the display will change to "−01" and the pitch will drop slightly. The display will continue to alternate between "tun" and the tuning value.

STEP 4
To select other Programming Mode functions, press one of the SOUND SELECT buttons (see page 6 for the list of PROGRAMMING MODE FUNCTIONS). Otherwise, exit the Programming Mode by pressing any button except the REVERB, TOUCH and SOUND SELECT buttons. The display will stop flashing to indicate that you have left the Programming Mode.

◆ TRANSPOSE



The TRANSPOSE function allows you to adjust the PXG30's pitch by half-steps. Here is the procedure:

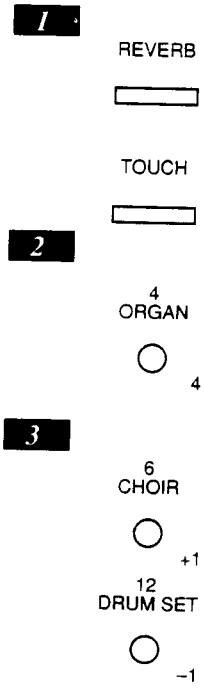
STEP 1
Enter the Programming Mode.

STEP 2
Press **SOUND SELECT** button number "3". The display will begin to flash, alternating between "trn" (for Transpose) and the number "00" (or a current transpose value).

STEP 3
Press either the "**+1**" or "**−1**" button. (The transpose value can range from −12 to +12.) If you press the "+1" button, the number in the display will change to read "01" and the pitch will raise by a half-step. If you press the "−1" button instead, the number in the display will change to "−01" and the pitch will drop by a half-step.

STEP 4
To select other Programming Mode functions, press one of the SOUND SELECT buttons (see page 6 for the list of PROGRAMMING MODE FUNCTIONS). Otherwise, exit the Programming Mode by pressing any button except the REVERB, TOUCH and SOUND SELECT buttons. The display will stop flashing to indicate that you have left the Programming Mode.

◆ SELECTING A TOUCH TYPE



Your PXG30 lets you select from two different "touch" types which are numbered as follows:
"01": Offers a Normal Touch Type which simulates an acoustic piano's touch.
"02": For a wide dynamic range, providing greater contrast between loud and soft playing.
(If TOUCH Button light is not lit, Touch Response is not activated and all notes will be heard at the same volume level regardless of how hard you play the keys.)

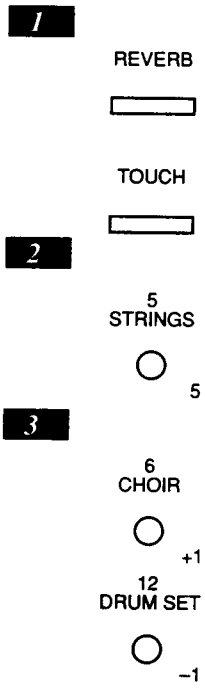
STEP 1
Enter the Programming Mode.

STEP 2
Press **SOUND SELECT** button number "4". The display will begins to flash, alternating between the letters "tou" (short for Touch) and the number of the current Touch Type.

STEP 3
Press either the "**+1**" or "**−1**" button. (The Touch Type setting can be set at either "01" or "02".) The number in the display will change and the PXG30 will offer the alternative Touch Type.

STEP 4
To select other Programming Mode functions, press one of the SOUND SELECT buttons (see page 6 for the list of PROGRAMMING MODE FUNCTIONS). Otherwise, exit the Programming Mode by pressing any button except the REVERB, TOUCH and SOUND SELECT buttons. The display will stop flashing to indicate that you have left the Programming Mode.

◆ MIDI TRANSMIT CHANNEL SELECT (*MIDI FUNCTION) (See P.11)



Lets you set the PXG30's MIDI transmit channel (from MIDI channels 1 – 16).

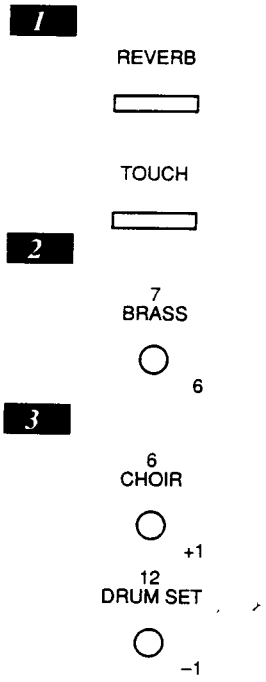
STEP 1
Enter the Programming Mode.

STEP 2
Press **SOUND SELECT** button number "5". The display will begin to flash, alternating between the letters "tch" (short for Transmit Channel) and the number of the current MIDI transmit channel.

STEP 3
Press either the "+1" or "−1" button to select the number of the MIDI TRANSMIT CHANNEL you desire.

STEP 4
To select other Programming Mode functions, press one of the SOUND SELECT buttons (see page 6 for the list of PROGRAMMING MODE FUNCTIONS). Otherwise, exit the Programming Mode by pressing any button except the REVERB, TOUCH and SOUND SELECT buttons. The display will stop flashing to indicate that you have left the Programming Mode.

◆ MIDI CHANNEL PART MUTE (*MIDI FUNCTION) (See P.11)



If you have a MIDI sequencer or a computer (with installed MIDI sequence software), you can use the PXG30 as a 16-part multi-timbral sound module to play MIDI song data (See the MIDI section).

In the "MIDI CHANNEL PART MUTE" mode, you can turn each of 16 MIDI channels "on" (so that it generates sounds when receiving MIDI note data) or "off" (generates no sound when receiving MIDI note data). (See page 12)

STEP 1
Enter the Programming Mode.

STEP 2
Press **SOUND SELECT** button number 6 marked with a red numeral. The display will begin to flash, alternating between the letters "ch1" (short for Channel 1) and "on" (or "off").

STEP 3
To select another channel number, press the "**6**" (marked with a red numeral) button again. Each time you press the "**6**" button, the channel number will change. Once you've reached the desired channel, use the "+1" and "−1" buttons to turn that channel "On" or "Off".

STEP 4
To select other Programming Mode functions, press one of the **SOUND SELECT** buttons (see page 6 for the list of PROGRAMMING MODE FUNCTIONS). Otherwise, exit the Programming Mode by pressing any button except the REVERB, TOUCH and SOUND SELECT buttons. The display will stop flashing to indicate that you have left the Programming Mode.

6. MIDI

◆ WHAT IS MIDI?

The letters MIDI stand for Musical Instrument Digital Interface. MIDI is an international standard for connecting synthesizers, drum machines, and other electronic instruments so that they can exchange performance data. The PXG30 features MIDI capability which allows it to function well in a MIDI environment.

◆ QUICK GUIDE TO "General MIDI" and "Standard MIDI File"

You are probably familiar with musical keyboards and synthesizer modules with General MIDI capability (such as Kawai's K11, GMega, X50/40-D, and KSP30/10). And perhaps you're already aware of digital sequencers which are compatible with the "Standard MIDI File Format" (such as the Q-80EX and Q-55). But in case all these concepts are new to you, this section should help you to gain a basic understanding of their meaning and their usefulness in making music.
As you know, MIDI is an acronym which stands for the Musical Instrument Digital Interface. The original MIDI specification was designed so that any machine equipped with MIDI could transmit and/or receive musical performance data (that is, it could send or receive the notes you play in your keyboard).
As MIDI became widely used, players encountered problems when utilizing two or more MIDI devices together. While MIDI instruments could share data, that data could sound quite different (sometimes quite bad) when you moved from one instrument to another. The General MIDI Standard and Standard MIDI File Format were designed to solve these problems and make MIDI more convenient and flexible for the user.

General MIDI (GM)

General MIDI (GM) is an industry standard created to ensure compatibility among various MIDI devices. The GM Specification sets standards regarding "sound locations" (so that a specific set of sounds will appear in the same order on all GM instruments), "drum-note mapping" (so that a particular note on a GM keyboard will always trigger a specific drum sound via MIDI) and other performance functions.

Using the illustration below as a guide, here are some examples of MIDI problems that often occurred before the development of General MIDI:

PROBLEM 1:

If you were to record a song into the MIDI sequencer above using Keyboard A and play it back on keyboard B, you could hear a STRINGS sound on Channel 2 when you really intended for a PIANO sound to be played. That would happen because the "sound location" numbers (called PROGRAM CHANGE numbers) for the two keyboards did not match. Keyboard A used a specific PROGRAM CHANGE number for PIANO, but Keyboard B used that same PROGRAM CHANGE number for STRINGS.

Keyboard A

Ch1: BASS
Ch2: PIANO
Ch3: BRASS

Sequencer

Keyboard B

Ch1: FLUTE
Ch2: STRING
Ch3: GUITAR

PROBLEM 2:

Next, you might try recording a drum track into the MIDI sequencer using the keys of Keyboard A to trigger the drum sounds. When you play the drum track back on Keyboard B, it may sound quite different. There might be CYMBALS where you intended a SNARE DRUM, or a RIM SHOT where you wanted the BASS DRUM. In some cases, you may not hear a particular sound at all. This would happen because the DRUM NOTE MAPPING on the two keyboards did not match. The same keys on each keyboard represented different drum sounds.

OTHER POSSIBLE PROBLEMS:

(1) Notes may cut off prematurely because Keyboard A has 24 notes of polyphony, but keyboard B has only 12 notes.
(2) Some tracks may not be heard at all because Keyboard A sends and receive MIDI data on all 16 MIDI channels, but Keyboard B only receives MIDI data on 8 channels.
(3) Some parts of your song may be played back one octave higher or lower than the original because of the difference in Octave Registration between the two keyboards.

The General MIDI Specification solves many of these problems by establishing the following criteria for a GM device:

* A GM instrument must have at least 128 sounds arranged in a specific GM order. All the PROGRAM CHANGE numbers will be the same on any GM instrument.
* A GM instrument must have at least 24 notes of polyphony.
* A GM instrument must have a specific Drum Note Mapping, Octave Registration, Pitch Bend Range, and Controller Assignment Numbers.

If Keyboard A and Keyboard B both adhered to these General MIDI specifications, the song you recorded into the MIDI sequencer on Keyboard A will sound very similar when played back on Keyboard B.

STANDARD MIDI FILE (SMF) Format

Most sequencers use 3.5-inch floppy disks as their external storage medium. A disk must be formatted (or prepared for use) according to the specific requirements of each sequencer. Before Standard MIDI Files came into being, a sequencer could not play back songs on a disk when that disk had been formatted on another sequencer.

For example, if you were to insert a song disk for Kawai's Q-80 into another manufacturer's sequencer, you would see a "DISK UNAVAILABLE" message in the display. That's because the other sequencer would not be able to recognize the Q-80's disk format.

The Standard MIDI File (SMF) Format was developed to solve this inconvenience. An SMF-compatible sequencer can playback songs stored on disks recorded by any other SMF-compatible sequencer.

Here are some additional advantages of Standard MIDI Files:

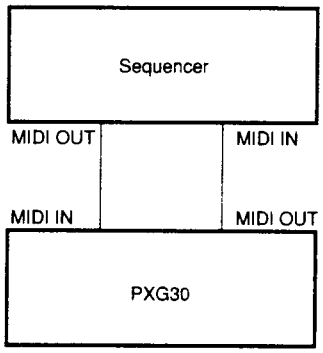
* When you purchase a new SMF sequencer to replace your older SMF sequencer, you can still use the data stored on the disks recorded on the old one.
* You can create a song using a computer with SMF-compatible sequencer software. Then, you can play it back on a more portable or easy-to-use SMF-compatible sequencer like Kawai's Q-55 or Q-80EX. This example is especially valuable for live performance when you don't want to bring your bulky computer-based sequencer to the performance location.
* Two composers in different cities can write songs together by exchanging disks recorded on their SMF-compatible sequencers.

Today, many manufactures offer General MIDI song disks that conform the Standard MIDI File format. Computer users who cannot yet play a musical instrument can even play back a song using their computer while operating the computer for another purpose.

General MIDI and STANDARD MIDI FILES have brought a whole new level of flexibility and control to MIDI-users around the world.

◆ MIDI CONNECTION EXAMPLES

External Sequencer Connections (Using a Kawai Q-55 Sequencer)
As shown in the figure, this MIDI connection allows a song on the PXG30 to be recorded on the external sequencer. It also allows you to playback the song from the sequencer.



If the sequencer has a floppy disk drive (such as Kawai's Q-55, Q-80 or Q-80EX sequencers), your song data could be stored on a floppy disk.
If the sequencer can accept Standard MIDI Files* (like the Q-55, and Q-80EX), any commercially available song disk using Standard MIDI File format and General MIDI compatible sound data can be played back through your PXG30.

* Standard MIDI File format is a standard format for sequencers with floppy disk drives. When a sequencer accepts Standard MIDI Files, it can play songs on disks which have been formatted on any other Standard MIDI File sequencer.

128 GENERAL MIDI TONES LIBRARY

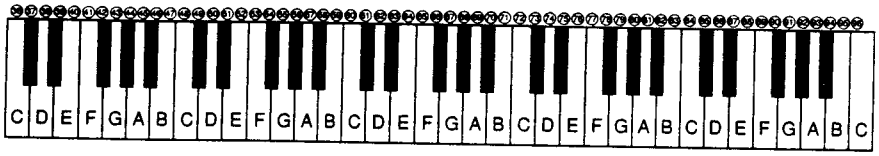
PIANO	GUITAR	ENSEMBLE	PIPE	SYNTH. SFX	OTHERS
1 Grand Piano	25 Nylon Guitar	49 String Ens. 1	73 Piccolo	97 Rain	113 Tinkle Bell
2 Bright Piano	26 Steel Guitar	50 String Ens. 2	74 Flute	98 Sound Track	114 Agogo
3 Electronic Grand	27 Jazz Guitar	51 Synth. Strings 1	75 Recorder	99 Crystal	115 Steel Drum
4 Honky Tonk	28 Clean Guitar	52 Synth. Strings 2	76 Pan Flute	100 Atmosphere	116 Wood Block
5 Electric Piano 1	29 Mute Guitar	53 Aah Choir	77 Bottle	101 Bright	117 Taiko Drum
6 Electric Piano 2	30 Overdrive	54 Ooh Choir	78 Shakuhachi	102 Goblin	118 Melody Tom
7 Harpsichord	31 Distortion	55 Synth. Choir	79 Whistle	103 Echoes	119 Synth. Tom
8 Clavi	32 Harmonics	56 Orchestra Hit	80 Ocarina	104 Science Fiction	120 Rev Cymbal
PERCUSSION	BASS	BRASS	SYNTH. LEAD	ETHNIC	121 Fret Noise
9 Celesta	33 Wood Bass	57 Trumpet	81 Square Lead	105 Sitar	122 Breath Noise
10 Glocken	34 Finger Bass	58 Trombone	82 Saw Lead	106 Banjo	123 Seashore
11 Music Box	35 Picked Bass	59 Tuba	83 Caliope Lead	107 Shamisen	124 Bird Tweet
12 Vibes	36 Fretless	60 Mute Trumpet	84 Chiffer Lead	108 Koto	125 Telephone
13 Marimba	37 Slap Bass 1	61 French Horn	85 Charan Lead	109 Kalimba	126 Helicopter
14 Xylophone	38 Slap Bass 2	62 Brass Section	86 Voice Lead	110 Bagpipe	127 Applause
15 Tubular Bell	39 Synth. Bass 1	63 Synth. Brass 1	87 Fifth Lead	111 Fiddle	128 Gunshot
16 Dulcimer	40 Synth. Bass 2	64 Synth. Brass 2	88 Bass & Lead	112 Shanai	129 Drum Set
ORGAN	STRINGS	REED	SYNTH. PAD		
17 Drawbar Organ	41 Violin	65 Soprano Sax	89 New Age Pad		
18 Percus Organ	42 Viola	66 Alto Sax	90 Warm Pad		
19 Rock Organ	43 Cello	67 Tenor Sax	91 Polysynth. Pad		
20 Church Organ	44 Contrabass	68 Baritone Sax	92 Choir Pad		
21 Reed Organ	45 Tremolo Strings	69 Oboe	93 Bowed Pad		
22 Accordion	46 Pizzicato	70 English Horn	94 Metal Pad		
23 Harmonica	47 Harp	71 Bassoon	95 Halo Pad		
24 Tango Accordion	48 Timpani	72 Clarinet	96 Sweep Pad		

SELECTING DRUM SETS FROM AN EXTERNAL MIDI DEVICE

The PXG30 features four different sets of drums which can be played from an external keyboard or controller via MIDI. You can select one of the drum sets by sending the following MIDI Program Change numbers from the external device on MIDI Channel 10.

Referring to the chart below, DRUM SET 2 can be selected by sending any one of the Program Change Numbers listed below under DRUM SET 2. For example, sending Program Change number 5 would select DRUM SET 2. Sending Program Change number 27 would select DRUM SET 3. Sending Program Change number 28 would select DRUM SET 4.

	DRUM SET 1 (DEFAULT)	DRUM SET 2	DRUM SET 3	DRUM SET 4
Program No.	1, 2, 3, 4, 8, 9, 10, 11, 15, 16, 17, 18, 22, 23, 24, 25, 29, 30, 31, 32, 33, 36, 37, 38, 39, 43, 44, 45, 46, 50, 51, 52, 53, 57, 58, 59, 60, 64, 65, 66, 67, 71, 72, 73, 74, 78, 79, 80, 81, 85, 86, 87, 88, 92, 93, 94, 95, 99, 100, 101, 102, 106, 107, 108, 109, 113, 114, 115, 116, 120, 121, 122, 123, 127, 128	5, 12, 19, 26, 40, 47, 54, 61, 68, 75, 82, 89, 96, 103, 110, 117, 124,	6, 13, 20, 27, 34, 41, 48, 55, 62, 69, 76, 83, 90, 97, 104, 111, 118, 125,	7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91, 98, 105, 112, 119, 126,



DRUM KEY ASSIGNMENTS

Once you have selected a particular DRUM SET, refer to the charts below which explain which drum sound has been assigned to each key. The sounds marked with an asterisk "*" for DRUM SET 1 can only be played via MIDI using an external MIDI device.

DRUM SET 1 (DEFAULT)

KEY NO.	KEY	KEY NO.	KEY
34 (Bb)	*APPLAUSE	91 G	BOB LOW CONGA
35 (B)	*ACOUSTIC BASS DRUM	92 Ab	CONCERT CYMBAL
36 C	BASS DRUM 1	93 A	GATED SNARE DRUM
37 C#	SIDE STICK	94 Bb	C. HIGH-HAT (HIGH)
38 D	ACOUSTIC SNARE	95 B	A. SNARE (HIGH)
39 Eb	HAND CLAP	96 C	E. SNARE (HIGH)
40 E	ELECTRONIC SNARE	97 (C#)	*A. SNARE (SUB)
41 F	LOW FLOOR TOM	98 (D)	*E. SNARE (SUB)
42 F#	CLOSED HIGH-HAT	99 (Eb)	*PEDAL HIGH-HAT (HIGH)
43 G	HIGH FLOOR TOM	100 (E)	*RIDE CYMBAL 1 (HIGH)
44 Ab	PEDAL HIGH-HAT	101 (F)	*RIDE BELL (HIGH)
45 A	LOW TOM	102 (F#)	*TAMBOURINE (HIGH)
46 Bb	OPEN HIGH-HAT	103 (G)	*COWBELL (HIGH)
47 B	LOW MID TOM	104 (Ab)	*RIDE CYMBAL 2 (HIGH)
48 C	HIGH MID TOM	105 (A)	*HIGH TIMBALE (HIGH)
49 C#	CRASH CYMBAL 1	106 (Bb)	*HIGH TIMBALE (LOW)
50 D	HIGH TOM	107 (B)	*CABASSA (HIGH)
51 Eb	RIDE CYMBAL 1	108 (C)	*MARACAS (HIGH)
52 E	CHINESE CYMBAL	109 (C#)	*BOB CLOSE HIGH HAT (HIGH)
53 F	RIDE BELL	110 (D)	*BOB SNARE DRUM (HIGH)
54 F#	TAMBOURINE	111 (Eb)	*BOB SNARE DRUM (SUB)
55 G	SPLASH CYMBAL	112 (E)	*BOB COWBELL (HIGH)
56 Ab	COWBELL	113 (F)	*GATED SNARE DRUM (HIGH)
57 A	CRASH CYMBAL 2	114 (F#)	*GATED SNARE DRUM (SUB)
58 Bb	VIBRASLAP	115 (G)	*TIMPANI F
59 B	RIDE CYMBAL 2	116 (Ab)	*TIMPANI F#
60 C	HIGH BONGO	117 (A)	*TIMPANI G
61 C#	LOW BONGO	118 (Bb)	*TIMPANI Ab
62 D	MUTE HIGH CONGA	119 (B)	*TIMPANI A
63 Eb	OPEN HIGH CONGA	120 (C)	*TIMPANI Bb
64 E	LOW CONGA	121 (C#)	*TIMPANI B
65 F	HIGH TIMBAL	122 (D)	*TIMPANI C
66 F#	LOW TIMBAL	123 (Eb)	*TIMPANI C#
67 G	HIGH AGOGO	124 (F)	*TIMPANI D
68 Ab	LOW AGOGO	125 (F#)	*TIMPANI Eb
69 A	CABASA	126 (G)	*TIMPANI E
70 Bb	MARACAS	127 (Ab)	*TIMPANI F
71 B	SHORT WHISTLE		
72 C	LONG WHISTLE		
73 C#	SHORT GUIRO		
74 D	LONG GUIRO		
75 Eb	CLAVES		
76 E	HIGH WOOD BLOCK		
77 F	LOW WOOD BLOCK		
78 F#	MUTE CUICA		
79 G	OPEN CUICA		
80 Ab	MUTE TRIANGLE		
81 A	OPEN TRIANGLE		
82 Bb	BRUSH SHORT		
83 B	BRUSH LONG		
84 C	BOB BASS DRUM		
85 C#	BOB CLOSED HIGH-HAT		
86 D	BOB SNARE DRUM		
87 Eb	BOB OPEN HIGH-HAT		
88 E	BOB COWBELL		
89 F	BOB HIGH CONGA		
90 F#	BOB MID CONGA		

NOTE: The sounds marked with an asterisk "*" for DRUM SET 1 can only be played via MIDI using an external MIDI device.

Below are the Drum Key Assignments for DRUM SETs 2, 3 and 4. These three additional DRUM SETs can only be played via MIDI using an external MIDI device.

KEY NO.	DRUM SET 2*	DRUM SET 3*	DRUM SET 4*
34 Bb	APPLAUSE	APPLAUSE	APPLAUSE
35 B	ACOUSTIC BASS DRUM	ACOUSTIC BASS DRUM	ACOUSTIC BASS DRUM
36 C	BOB BASS DRUM	BASS DRUM 1	BASS DRAM 1
37 C#	SIDE STICK	SIDE STICK	SIDE STICK
38 D	BOB SNARE DRUM	BRUSH SHORT	ACOUSTIC SNARE
39 Eb	HAND CLAP	BRUSH SHORT	CLAVES
40 E	ELECTRONIC SNARE	BRUSH LONG	ACOUSTIC SNARE
41 F	LOW FLOOR TOM	LOW FLOOR TOM	TIMPANI F
42 F#	BOB CLOSED HIGH-HAT	CLOSED HIGH-HAT	TIMPANI F#
43 G	HIGH FLOOR TOM	HIGH FLOOR TOM	TIMPANI G
44 Ab	BOB CLOSED HIGH-HAT	PEDAL HIGH-HAT	TIMPANI Ab
45 A	LOW TOM	LOW TOM	TIMPANI A
46 Bb	BOB OPEN HIGH-HAT	OPEN HIGH-HAT	TIMPANI Bb
47 B	LOW MID TOM	LOW MID TOM	TIMPANI B
48 C	HIGH MID TOM	HIGH MID TOM	TIMPANI C
49 C#	CRASH CYMBAL 1	CRASH CYMBAL 1	TIMPANI C#
50 D	HIGH TOM	HIGH TOM	TIMPANI D
51 Eb	RIDE CYMBAL 1	RIDE CYMBAL 1	TIMPANI Eb
52 E	CHINESE CYMBAL	CHINESE CYMBAL	TIMPANI E
53 F	RIDE BELL	RIDE BELL	TIMPANI F
54 F#	TAMBOURINE	TAMBOURINE	TAMBOURINE
55 G	SPLASH CYMBAL	SPLASH CYMBAL	SPLASH CYMBAL
56 Ab	BOB COWBELL	COWBELL	COWBELL
57 A	CRASH CYMBAL 2	CRASH CYMBAL 2	CONCERT CYMBAL
58 Bb	VIBRASLAP	VIBRASLAP	VIBRASLAP
59 B	RIDE CYMBAL 2	RIDE CYMBAL 2	CONCERT CYMBAL
60 C	HIGH BONGO	HIGH BONGO	HIGH BONGO
61 C#	LOW BONGO	LOW BONGO	LOW BONGO
62 D	BOB HIGH CONGA	MUTE HIGH CONGA	MUTE HIGH CONGA
63 Eb	BOB MID CONGA	OPEN HIGH CONGA	OPEN HIGH CONGA
64 E	BOB LOW CONGA	LOW CONGA	LOW CONGA
65 F	HIGH TIMBAL	HIGH TIMBAL	HIGH TIMBAL
66 F#	LOW TIMBAL	LOW TIMBAL	LOW TIMBAL
67 G	HIGH AGOGO	HIGH AGOGO	HIGH AGOGO
68 Ab	LOW AGOGO	LOW AGOGO	LOW AGOGO
69 A	CABASA	CABASA	CABASA
70 Bb	MARACAS	MARACAS	MARACAS
71 B	SHORT WHISTLE	SHORT WHISTLE	SHORT WHISTLE
72 C	LONG WHISTLE	LONG WHISTLE	LONG WHISTLE
73 C#	SHORT GUIRO	SHORT GUIRO	SHORT GUIRO
74 D	LONG GUIRO	LONG GUIRO	LONG GUIRO
75 Eb	CLAVES	CLAVES	CLAVES
76 E	HIGH WOOD BLOCK	HIGH WOOD BLOCK	HIGH WOOD BLOCK
77 F	LOW WOOD BLOCK	LOW WOOD BLOCK	LOW WOOD BLOCK
78 F#	MUTE CUICA	MUTE CUICA	MUTE CUICA
79 G	OPEN CUICA	OPEN CUICA	OPEN CUICA
80 Ab	MUTE TRIANGLE	MUTE TRIANGLE	MUTE TRIANGLE
81 A	OPEN TRIANGLE	OPEN TRIANGLE	OPEN TRIANGLE
82 Bb	BRUSH SHORT	BRUSH SHORT	BRUSH SHORT
83 B	BRUSH LONG	BRUSH LONG	BRUSH LONG
84 C	BOB BASS DRUM	BOB BASS DRUM	BOB BASS DRUM
85 C#	BOB CLOSED HIGH-HAT	BOB CLOSED HIGH-HAT	BOB CLOSED HIGH-HAT
86 D	BOB SNARE DRUM	BOB SNARE DRUM	BOB SNARE DRUM
87 Eb	BOB OPEN HIGH-HAT	BOB OPEN HIGH-HAT	BOB OPEN HIGH-HAT
88 E	METRONOME CLICK	METRONOME CLICK	APPLAUSE
89 F	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
90 F#	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
91 G	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
92 Ab	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
93 A	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
94 Bb	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
95 B	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
96 C	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK

KEY NO.	DRUM SET 2*	DRUM SET 3*	DRUM SET 4*
97 C#	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
98 D	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
99 Eb	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
10 E	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
101 F	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
102 F#	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
103 G	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
104 Ab	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
105 A	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
106 Bb	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
107 B	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
108 C	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
109 C#	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
110 D	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
111 Eb	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
112 E	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
113 F	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
114 F#	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
115 G	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
116 Ab	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
117 A	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
118 Bb	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
119 B	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
120 C	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
121 C#	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
122 D	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
123 Eb	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
124 E	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
125 F	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
126 F#	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK
127 G	METRONOME CLICK	METRONOME CLICK	METRONOME CLICK

■ SPECIFICATIONS :

KEYBOARD	61 Full-Size Keys
POLYPHONY	28 notes
TONE COLORS	128 Instrument Tones (General MIDI), 1 Drum Set Sound, 3 Preset PIANO Button 12 Preset ENSEMBLE SOUNDS Buttons
DIGITAL RECORDER	REC/STOP Button, PLAY/STOP Button, TEMP (METRONOME)
OTHER FEATURES	Volume Control, Transpose, Tune, Digital Reverb, Touch Response On/Off, Touch Type Selection
MIDI FEATURES	Local Control On/Off, MIDI Transmit Channel Select, MIDI Channel Part Mute
PEDAL	Sustain Pedal (Kawai F-1)
JACKS	Headphone x 2, Sustain Pedal, MIDI In/Out, Line Out L/R, DC In
SPEAKERS	12 × 2 (cm), 4.8" × 2 (inches)
OUTPUT POWER	2.5W × 2
DIMENSIONS	912 × 307 × 97 (mm), 36" × 12-1/8" × 3-7/8" (inches)
WEIGHT:	4.4 kg (9.8 lbs)
OPTIONAL ACCESSORIES	Sustain Pedal, Music Rest, AC Adaptor, Chrome Legs, MIDI cables

Specifications subject to change without notice.

KAWAI DIGITAL PIANO
MODEL: PXG30

MIDI IMPLEMENTATION CHART

Date: June, 1994
Version: 1.0

Function		TRANSMITTED	RECEIVE	REMARKS
Basic Channel				
	(Default)	1	1	
	(Changed)	1 – 16	1 – 16	
Mode	(Default)	3	1	
	(Message)	X	3	
	(Altered)	*****	X	
Note Number		36 – 96 *1	0 – 127	*1 24 – 108 (Changed by Transposing)
	(True Voice)	*****	0 – 127	
Velocity	(Note ON)	○: 9nH v=1-127	○	
	(Note OFF)	X: 9nH v=0	X	
After Touch	Key's	X	X	
	Channel's	X	○ *2	
Pitch Bend		X	○ *2	
Control Change	1	X	○ *2	Modulation
	6	X	○	Data Entry
	7	X	○	Part Volume
	10	X	○ *2	Pan Pot
	11	X	○	Expression
	64	○	○ *2	Hold 1
	66	X	X	Sostenuto
	67	X	X	Soft Pedal
	91	○	○	Reverb Depth
				(0-3F:OFF,40-7F:ON)
	98, 99	X	X	NRPN
	100, 101	X	○ *3	RPN
	120	X	○	All Sound Off
	121	X	○	Reset All Controllers
Program Change		○: 0 – 127	○: 0 – 127	
	True	*****		
System Exclusive		○	○	
Common				
(Song Position)		X	X	
(Song Select)		X	X	
(Tune)		X	X	
System: Real Time				
(Clock)		X	X	
(Commands)		X	X	
Others				
(Local ON/OFF)		X	X	
(All Notes OFF)		X	○	
(Active Sense)		○	○	
(Reset)		X	X	

Notes: *2 Except channel 10
*3 #0=Pitch Bend Sensitivity
#1=Master Fine Tuning
#2=Master Coarse Tuning

Mode 1: OMNI ON, POLY
Mode 2: OMNI ON, MONO
Mode 3: OMNI OFF, POLY
MODE 4: OMNI OFF MONO